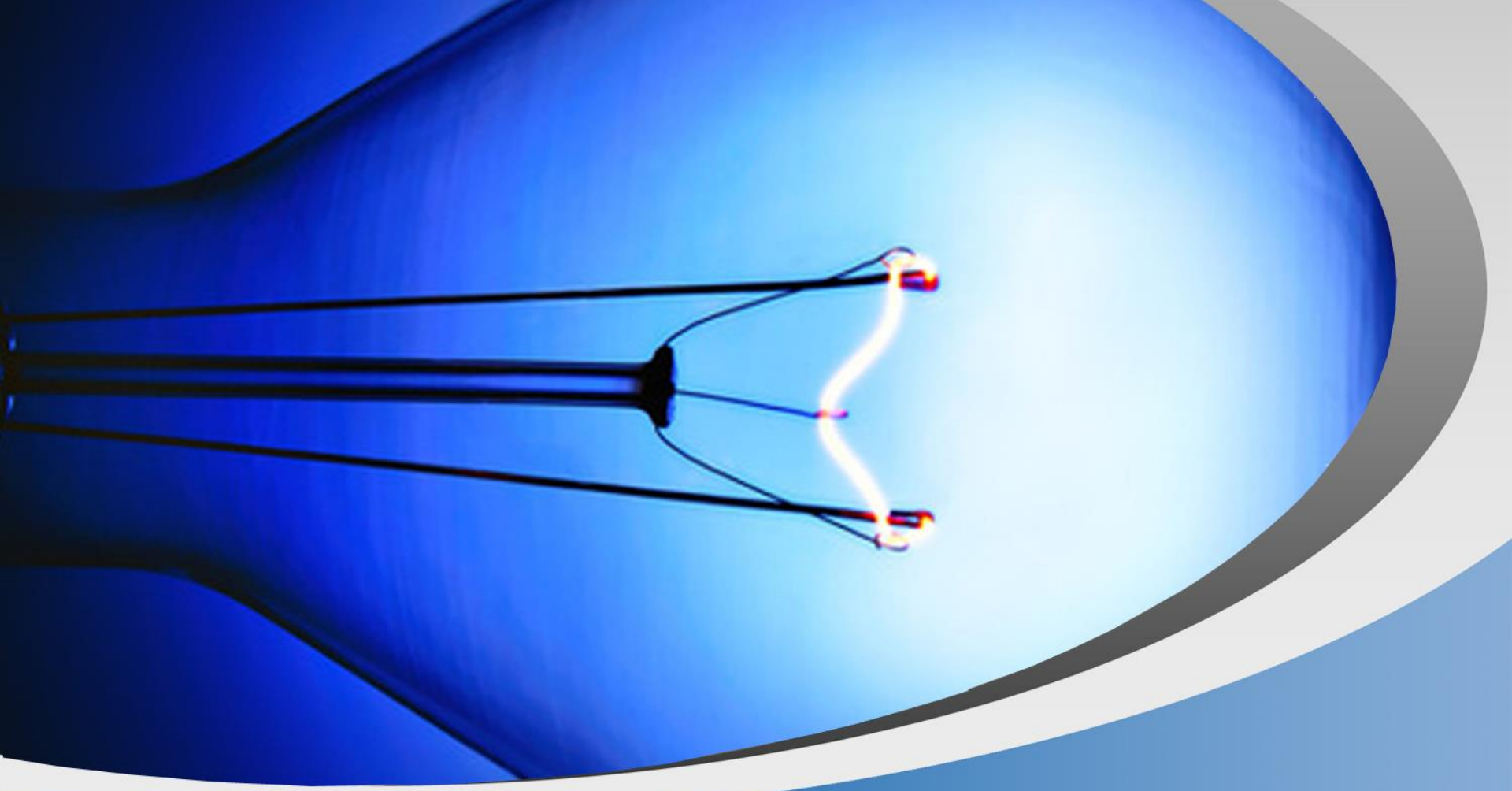


SystemC CCI WG
Parameter Destruction Resurrection

Sonal Poddar, Intel
November 2016

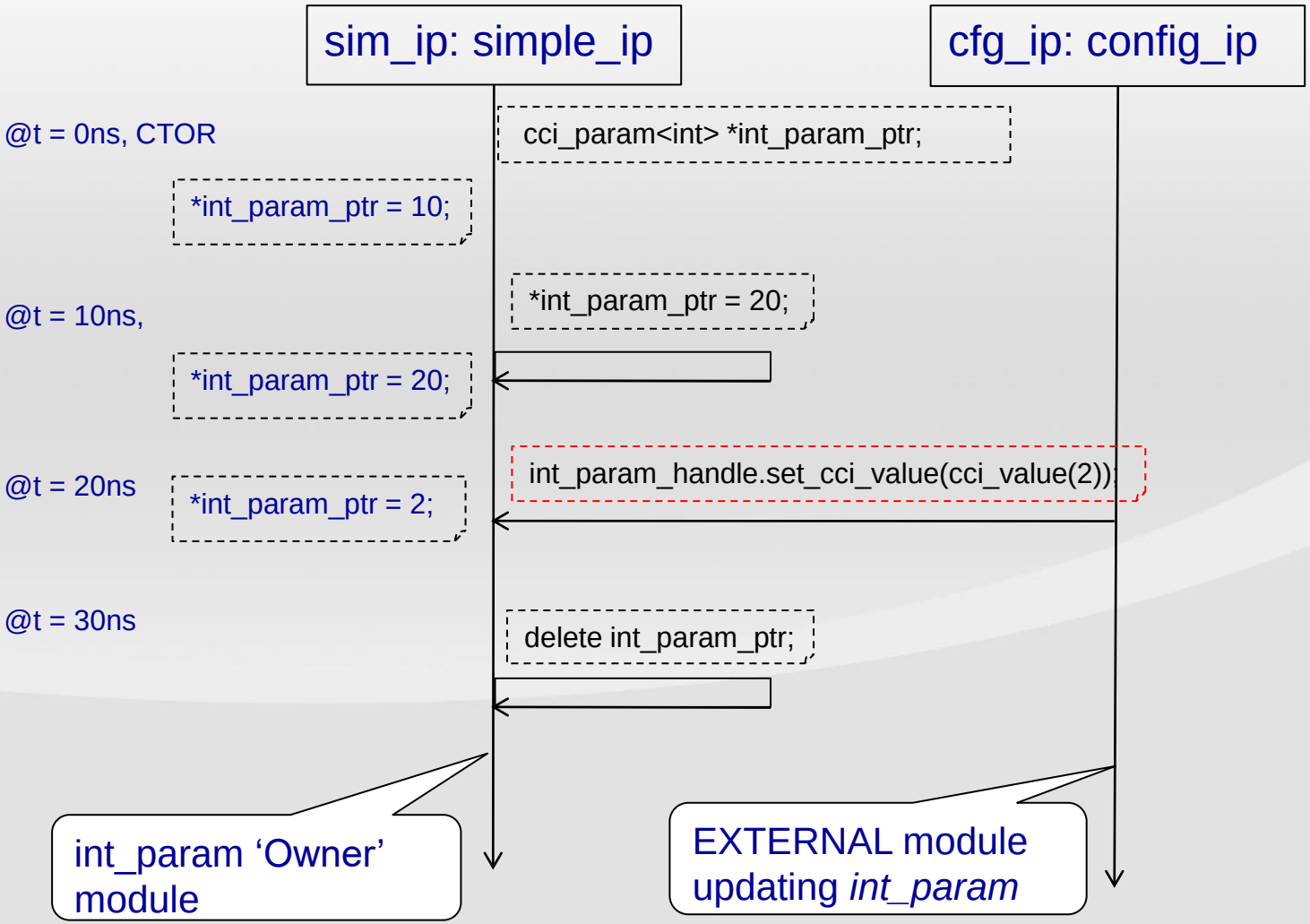
accellera
SYSTEMS INITIATIVE

Resurrection of Parameter

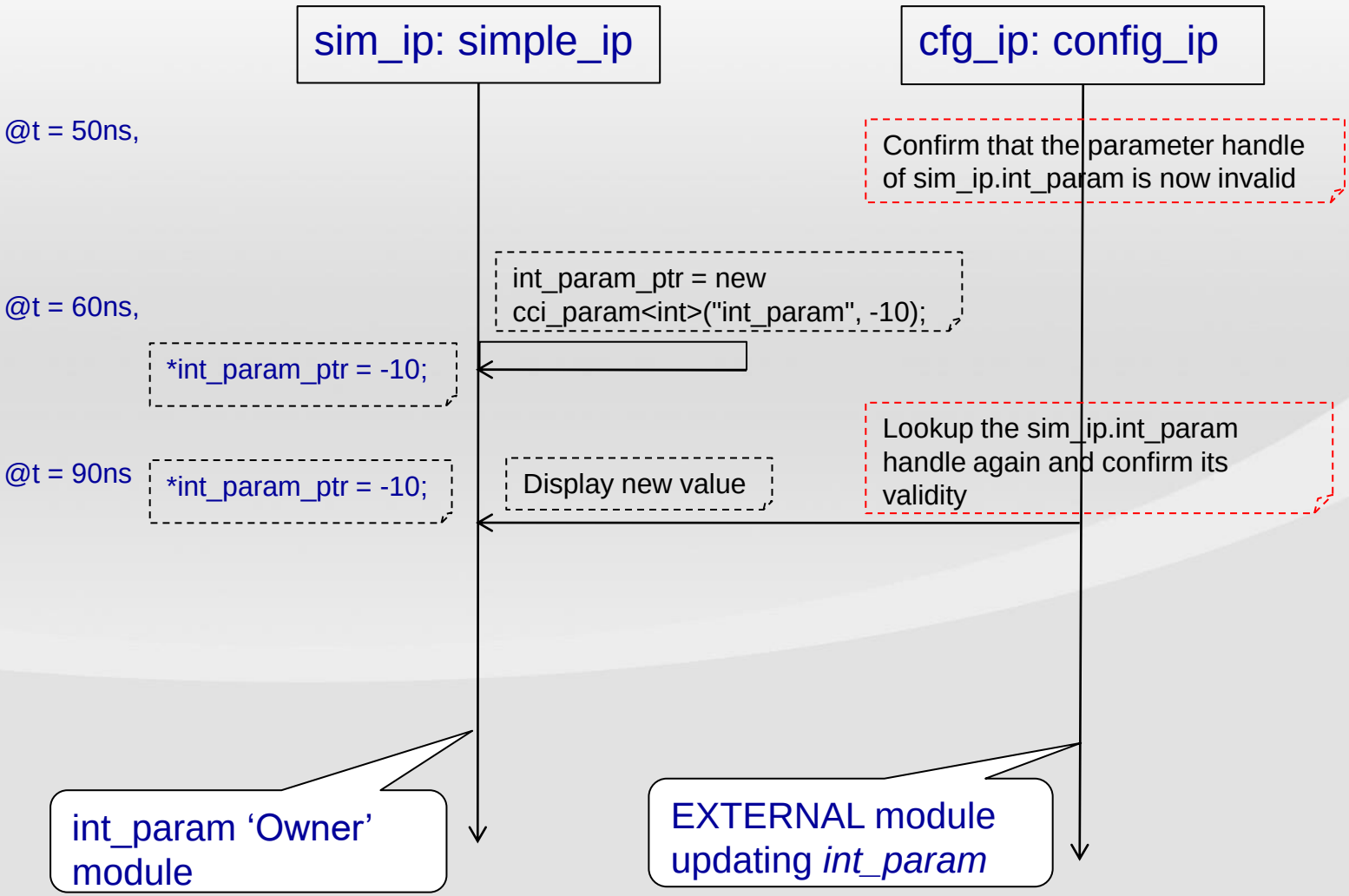
- **Whenever a parameter is destructed, all handles to that parameter are no longer valid and should not be used.**
- **The parameter can be resurrected by the owner module and can be initialized to a new value.**
- **This makes the parameter handle valid again and usage can resume.**

Example Sequence Diagram

Demonstrates that a parameter can be resurrected from the owner module



Cont'd



Expected Output
(ex21_Param_Destruction_Resurrection.log)

```
SystemC Simulation
Info: sim_ip: @0 s, Ctor: Default value of sim_ip.int_param is 10
Info: sc_main: Begin Simulation.
Info: sim_ip: @10 ns, execute: Set value of int_param to 20
Info: sim_ip: @10 ns, execute: Current value of int_param is 20
Info: cfg_ip: @20 ns, execute: [EXTERNAL] Set value of sim_ip.int_param to 2
Info: cfg_ip: @20 ns, execute: [EXTERNAL] Current value of sim_ip.int_param is 2
Info: sim_ip: @30 ns, execute: Destroy sim_ip.int_param
Info: cfg_ip: @50 ns, execute: [EXTERNAL] Parameter handle of sim_ip.int_param is no more valid
Info: sim_ip: @60 ns, execute: Resurrect sim_ip.int_param
Info: cfg_ip: @90 ns, execute: [EXTERNAL] Parameter handle of sim_ip.int_param is valid again
Info: cfg_ip: @90 ns, execute: [EXTERNAL] Current value of sim_ip.int_param is -10
Info: sc_main: End Simulation.
Info: sim_ip: Dtor: Current value of sim_ip.int_param is -10
```